

## Facilitator's Agenda

### Using Data for Improvement: Pareto Graph Activity

#### Objectives

Participants will:

- Learn about and select from a wide range of tools and techniques for analyzing data for a particular purpose – particularly for understanding variation
- Draw inferences from data

Time	Session Plan & Activities	Notes/Materials
5 min.	<p><b>Introduction</b></p> <ul style="list-style-type: none"> <li>● Introduce the Pareto principle</li> <li>● Outline process for creating a Pareto chart using an example               <ul style="list-style-type: none"> <li>○ Brainstorm general categories of causes</li> <li>○ Review the data and tally the number of incidents for each category (cause). List the causes in order of frequency – from most to least frequent.</li> <li>○ Calculate the cumulative proportion for each row (cause).</li> <li>○ Chart your data. The frequency of causes is represented by an ordered bar chart with the categories (reasons) listed along the x-axis.</li> <li>○ Include a line showing the cumulative percentage (axis on the right).</li> </ul> </li> </ul>	Introductory slides
15 min.	<p><b>Small Group Activity: Creating a Pareto Graph</b></p> <ul style="list-style-type: none"> <li>● Groups create pareto graph based on data about community college math course completion               <ul style="list-style-type: none"> <li>○ Identify loss points in the developmental math sequence using the data provided</li> <li>○ Create an ordered bar graph on the x-y axis sheet</li> <li>○ Add the proportion line</li> </ul> </li> <li>● Review Pareto charts from small groups</li> <li>● Highlight key considerations for analysis               <ul style="list-style-type: none"> <li>○ A Pareto chart offers one insight into the current state. Be cautious about not overinterpreting findings and consider system interdependencies.</li> <li>○ While identifying the vital few root causes is important to drive improvement efforts, it's important not to lose sight of other critical issues to address, even if infrequent.</li> </ul> </li> </ul>	Participant handouts: blank chart, school data
5 min.	<p><b>Wrap Up</b></p> <ul style="list-style-type: none"> <li>● Share key takeaways</li> <li>● Address questions</li> </ul>	